

SN:09/878,145

01 P 10395 US

REMARKS

Claim 1 has been amended to include the limitations of original Claims 1 and 3. This amendment is supported by at least original Claims 1 and 3.

Claim 4 has been amended to depend from Claim 1 rather than canceled Claim 3. This amendment is supported by at least Claims 1, 3, and 4.

No new matter has been added.

SN:09/878,145

01 P 10395 US

CLAIMSClaim rejections under 35 U.S.C. § 112

The Examiner rejected Claim 17 "under 35. U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Applicants respectfully submit that the rejection of Claim 17 has been rendered moot by the cancellation of Claim 17.

Claim rejections under 35 U.S.C. § 102 (Dowling)

The Examiner rejected Claims 1, 2, and 5-8 under "35 U.S.C. 102(a) as being anticipated by Dowling (patent No. 6,157,988)." Applicants respectfully submit that the rejection of Claims 1, 2, and 5-8 have been rendered moot by the amendment of Claim 1 to include the limitation of Claim 3. Thus, Examiner's rejection of Claim 3 under 35 U.S.C. 103 is now applicable to amended Claim 1. Applicants respond to the 35 U.S.C. 103 rejections below.

Claim rejections under 35 U.S.C. § 102 (Munson)

The Examiner rejected Claims 1, 10, 11-16, 18-23 under "35 U.S.C. 102(a) as being anticipated by Munson (patent No. 6,408,377)." Applicants respectfully submit that the rejection of Claim 1 has been rendered moot by the amendment of Claim 1 to include the limitation of Claim 3. Thus, Examiner's rejection of Claim 3 under 35 U.S.C. 103 is now applicable to amended Claim 1. Applicants respond to the 35 U.S.C. 103 rejections below.

SN:09/878,145

01 P 10395 US

Furthermore, Applicants respectfully submit that the rejection of Claims 10, 11-16, and 18-23 has been rendered moot by the cancellation of Claims 10, 11-16, and 18-23.

Claim rejections under 35 U.S.C. § 103

The Examiner rejected Claim 9 under "35 U.S.C. 103(a) as being unpatentable over Dowling (patent No. 6,157,988)." Applicants respectfully submit that the rejection of Claim 9 has been rendered moot by the amendment of Claim 1, from which Claim 9 depends, to include the limitation of Claim 3.

The Examiner rejected Claims 3 and 4 under "35 U.S.C. 103(a) as being unpatentable over Dowling as applied to claims 1-2 above, and further in view of Olson (patent No. 5,878,242)." Because Claim 1 has been amended to include the limitation of original Claim 3, The Examiner's rejection of Claim 3 is now applicable to amended Claim 1. With respect to (original) Claim 1 the Examiner stated that

Dowling taught the invention as claimed including a data processing ("DB") system comprising:

- a) First pipeline stage (210) (e.g., fig. 7);
- b) First expansion stage (712) coupled to the first pipeline stage (210) (e.g., see fig.7); and
- c) Second pipeline stage (212) coupled to the first pipeline stage (210) and the first expansion stage (712), wherein the second pipeline stage is configured to selectively receive instructions from the first pipeline stage or the first expansion stage (e.g., see fig. 7 and col. 15, lines 1-65).

Specifically, with regards to original Claim 3 (now part of amended Claim 1), the Examiner stated:

SN:09/878,145

01 P 10395 US

Olson taught a second expansion stage (102) coupled [to] the first pipeline stage (104) and the first expansion stage (130) via and wherein the first expansion stage is configured to selectively receive instructions from the first pipeline stage (104) or the second expansion stage (102).

Applicants respectfully submit that the Examiner's interpretation of Olson is flawed. Specifically, Applicants respectfully submit that FPQn 102 and FPQx 104 of Olson do not function as expansion stages as recited in Claim 1. Specifically, FPQn 102 and FPQX 104 are used in Fig. 3 of Olson. However, Applicants respectfully submit that "Fig. 3 is a block diagram of a data flow diagram" (Olson, Col. 2., lines 58-59) not a circuit diagram. Furthermore, Applicants respectfully submit the data flow of Fig. 3 is used to illustrate "store forwarding" not normal instruction flow. Specifically, Olson states that "FPQn 102 is only forwarded to the arithmetic instruction on which FPQn depends." (Olson, Col. 4, lines 63-64). However "forwarding" instructions as used with respect Fig. 3 is not actual transferring of instructions. Specifically, as explained in Olson:

If the target register physical address of the arithmetic instruction in FPQx 104 equals the source register physical address of the store instruction in FPQn 102, the control logic 18 causes the Muxs 122 and 124 to append the tag for FPQn 102 to the instruction in FPQx 104. (Olson, Col. 5 line 65-66) (emphasis added).

Furthermore Olson explains that:

The tag then follows the arithmetic instruction through the execution pipeline. Once the tag identifying the

SN:09/878,145

01 P 10395 US

store instruction in FPQn 102 is
appended to the appropriate
instruction, the store instruction is
removed from the floating point
instruction queue 34.
(Olson Col. 6, lines 15-18)

Claim 1 recites "the second pipeline stage is configured to selectively receive instructions from the first pipeline stage or the first expansion stage" and "wherein the first expansion stage is configured to selectively receive instructions from the first pipeline stage or the second expansion stage" (emphasis added). Because forwarding as used by Olson transfers a tag rather than the actual instructions, Applicants respectfully submit that the portions of Olson cited by the Examiner do not teach or suggest the limitations recited in Claim 1. Furthermore, because the portions of Dowling cited by the Examiner do not teach the "second expansion stage" as recited in Claim 1; Applicants respectfully submit neither Olson, Dowling, or the combination thereof teach or suggest the limitations of amended Claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 1. In addition, Applicants respectfully submit that Claims 2 and 4-9, which depend from Claim 1 are likewise patentable.

SN:09/878,145

01 P 10395 US

CONCLUSION

Claims 1, 2, 4-9 are pending in the present application. Reconsideration and allowance of these claims is respectfully requested. If there are any questions, please telephone Edward Mao at (925) 895-3546 to expedite prosecution of this case.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION (37 C.F.R. 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being transmitted by **facsimile** to the Patent and Trademark Office.

Date: 8/12/2004 Signature: Edward Mao